

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/051238

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G01R33/28 G01R33/341 G01R33/3415

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G01R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, WPI Data, INSPEC, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | US 5 936 406 A (POTTHAST ANDREAS)<br>10 August 1999 (1999-08-10)<br>column 1, line 53 -column 2, line 62<br>column 4, line 40 -column 6, line 65;<br>figures 3-6 | 1-7                   |
| X          | US 2002/021128 A1 (KUHARA SHIGEHIDE)<br>21 February 2002 (2002-02-21)<br>paragraphs '0091!-'0097!; figure 5  | 1-7                   |
| X          | US 2002/055676 A1 (VISSER FREDERIK ET AL)<br>9 May 2002 (2002-05-09)<br>paragraphs '0015!-'0027!; figure 1   | 1-4,6,7               |
|            | ---<br>-/-   |                       |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

28 September 2004

Date of mailing of the international search report

19/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Lersch, W

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/051238

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | PATENT ABSTRACTS OF JAPAN<br>vol. 1995, no. 08,<br>29 September 1995 (1995-09-29)<br>& JP 07 124135 A (TOSHIBA CORP),<br>16 May 1995 (1995-05-16)<br>abstract<br>---         | 1,2,4,6,<br>7         |
| X          | US 5 715 822 A (DUMOULIN CHARLES LUCIAN<br>ET AL) 10 February 1998 (1998-02-10)<br>column 2, line 52 -column 5, line 2;<br>figures 1-3<br>---                                | 1-3,6,7               |
| A          | PATENT ABSTRACTS OF JAPAN<br>vol. 016, no. 202 (C-0940),<br>14 May 1992 (1992-05-14)<br>-& JP 04 035645 A (TOSHIBA CORP),<br>6 February 1992 (1992-02-06)<br>abstract<br>--- | 1-7                   |
| A          | US 6 492 814 B1 (DARROW ROBERT DAVID ET<br>AL) 10 December 2002 (2002-12-10)<br>column 4, line 15 -column 6, line 59;<br>figures 3,4<br>-----                                | 1,4-7                 |

Information on patent family members

International Application No

PCT/IB2004/051238

| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s)                        | Publication<br>date                    |
|---|----|---------------------|---|--|
| US 5936406                                | A  | 10-08-1999          | DE 19653535 C1<br>JP 10179551 A                   | 10-06-1998<br>07-07-1998               |
| US 2002021128                             | A1 | 21-02-2002          | JP 2002010992 A                                   | 15-01-2002                             |
| US 2002055676                             | A1 | 09-05-2002          | WO 0229429 A2<br>EP 1228379 A1<br>JP 2004510513 T | 11-04-2002<br>07-08-2002<br>08-04-2004 |
| JP 07124135                               | A  | 16-05-1995          | NONE  |  |
| US 5715822                                | A  | 10-02-1998          | NONE  |  |
| JP 04035645                               | A  | 06-02-1992          | JP 1851557 C<br>JP 5065179 B                      | 21-06-1994<br>17-09-1993               |
| US 6492814                                | B1 | 10-12-2002          | NONE  |  |